

Figure 8 is a transverse cross-section through the embodiment of the article shown in Figure 1 in use without the transfer layer being shown.

Please replace the paragraph on page 13, beginning at line 9, with the following rewritten paragraph:

Figures 11 (a)-(d) are detailed views of other embodiments of the portion of the article shown in Figure 10 enclosed by the circle X.

Please replace the paragraph on page 13, beginning at line 11, with the following rewritten paragraph:

Figure 12 is a transverse cross-section through a still another embodiment of the article.

Please replace the paragraph on page 14, beginning at line 1, with the following rewritten paragraph:

Figures 17 (a)-(c) are detailed views of embodiments of the portion of the article shown in Figure 16 enclosed by the circle XVII.

Please replace the paragraph on page 14, beginning at line 11, with the following rewritten paragraph:

Figure 20 is a transverse cross-section through another embodiment of the article, ~~shown in Figure 14 in use.~~

Please replace the paragraph on page 24, beginning at line 18, with the following rewritten paragraph:

There is shown in Figures 1-3 one embodiment of the current invention illustrated with respect to an absorbent article 1 according to the current invention. The absorbent article is comprised of a longitudinally extending central portion 2 having longitudinal or lateral sides 30 and transverse ends 3. The central portion may have an approximately rectangular shape, an approximately oval shape, or preferably an hour-glass or dog-bone shape wherein the transverse ends are wider than the central portion of the absorbent article.

Please replace the paragraph on page 28, beginning at line 19, with the following rewritten paragraph:

As shown in Figure 5, in the longitudinal middle section of the absorbent article having an optional transfer layer 37, between the cover 2 8 and the absorbent core 7, the cuffs 6 extend outward from the lateral sides of the absorbent article and are preferably maintained within the plane of the base portions of the cuff. That is it is preferred that the cuffs remain substantially flat, i.e. the cuffs preferably remain in a plane which is substantially parallel to the cover layer and/or the barrier layer of the absorbent article. However, the cuffs may optionally extend a distance above the body faceable surface 16 of the central portion 2 -- specifically, above the portion of the body faceable surface 16 that is adjacent the sides 30 of the central portion. In accordance with this aspect of the current invention, the distance by which the cuffs extend above the adjacent portion of the body faceable surface 16 may be greater than zero to enhance a sealing contact with the user's body, as shown in Figure 8. However, this distance must not be so great, notwithstanding the aforementioned directional stability, that the cuffs 6 fold inwardly over the body faceable surface 16 in use, thereby covering a substantial portion of the body faceable surface and preventing it from passing fluid to the absorbent core 7.

Please replace the paragraph on page 32, beginning at line 12, with the following rewritten paragraph:

In yet another alternate embodiment of the absorbent article according to the current invention is shown in Figure 13 (b). According to this embodiment, the cuff further contains a substantially flat strip of a flexible resilient material 14 attached to the barrier layer 10. The strip 14 may be formed from a cross-linked foam, such as VOLARA, supplied by Voltek, a division of Sekisui America Corporation of Lawrence, MA, having a thickness in the range of approximately 0.03 to 0.12 inch. The strip 14 is advantageously disposed between the portion 10 of the barrier layer 10 and the high loft material 47 adjacent their longitudinal edges respectively, and attached via adhesive to each. Moreover, as shown in Figure 9, the barrier layer portion 10 may be extended so as to cover substantially all of the outward facing surface of the cuff, thereby further preventing leakage.

Please replace the two paragraphs on page 35, beginning at line 1, with the following rewritten paragraphs:

Importantly, in each of the approaches to attaching the cuffs to the central portion 2 shown in Figures 10 and 11(a)-(d), the cuff 6 is attached to the lateral sides of the absorbent article 30 along a portion of the surfaces forming the sides of the cuff, rather than along its edges. Thus, at least a portion of each of the sides 30 of the central portion is formed from a laminate comprising layers of cuff, cover layer and barrier layer material. Unlike prior art attempts at forming cuffs, the cuffs are not attached along flexible joint lines adjacent the tops of the sides 30 of the central portion or transversely spaced apart from the sides 30, which would allow them to freely bend. Such prior art flexible joints have the undesirable characteristics of requiring the presence of elastic within the cuffs or contact between the elastic in the panty crotch and the cuffs in order to maintain them in the upright position. Such flexible joints also allow the cuffs to fold over the body faceable surface 16 of the central portion, thereby reducing its effective area.

By contrast, the attachment method according to the embodiment of the current invention shown in Figures 10 and 11(a)-(d), gives adequate directional stability to the cuffs

so that they will extend upward so as to make good sealing contact with the perineum without the incorporation of elastic members into the cuffs.

Please replace the paragraph on page 36, beginning at line 7, with the following rewritten paragraph:

As shown in Figure 11(a)-(d), the loop type cuffs 6 optionally form cavities that impart compliancy to the cuff, as previously discussed with respect to the embodiment shown in Figure 6(a). Moreover, although, unlike some prior art cuffs, the cuffs according to the current invention do not require the presence of elastic members to cause them to extend upright, elastic members, such as those previously discussed with respect to the embodiment shown in Figures 6(a), 6(b), 7(a) and 7(b), may be advantageously incorporated into the loop type cuff 6 to create the arcuate shape. Figure 11(c) shows a cuff 41 in which an elastic filament 14 is disposed in the cavity 36.

Please replace the two paragraphs on page 39, beginning at line 4, with the following rewritten paragraphs:

As shown in Figures 16 and 17(a)-(c), each cuff 43 may be formed by joining the portions 10 and 18 of the barrier layer 9 and cover layer 10, respectively, adjacent their longitudinal edges together via an adhesive 34, thereby forming a flange. A compliant cuff 25 is formed by enclosing the flange or joined portion in a strip of resilient high loft material 55, such as that used to form the cuffs 6 shown in Figures 6(a), 6(b), 7(a) and 7(b). The cuff 25 may be attached so as to form a loop that encloses a cavity 36, as previously discussed, thereby giving it considerable compliancy. As before, the size and shape of the cavity 36 can be adjusted to control the compliancy of the cuff 25.

~~A strip of elastic foam 15~~, Elastic foam in the form of a strip, placed in tension when applied to the absorbent article, may be disposed between the barrier layer and cover layer portions 10 and 18, respectively, that form the flange so as to impart the aforementioned arcuate shape to the absorbent article, as shown in Figure 17(a). Alternatively, as shown in

Figure 17(b), a strip of elastic foam 47 may be laminated to the interior surface of the strip of material 55 that forms the cuff 25', as previously discussed with respect to the embodiment shown in Figure 6(a). As shown in Figure 17(c), a cuff 25" could be formed by wrapping a layer of fluid repellent porous foam material 46 around the strip of high loft material 55 to impart further cushioning for the cuff. The layer of foam 46 could itself be elasticized and applied to the absorbent article in tension, thereby eliminating the need for the elastic foam 15 to impart the arcuate shape.

Please replace the paragraph on page 40, beginning at line 10, with the following rewritten paragraph:

Importantly, wings 19 are attached to the central portion 2 so that they cooperate with the cuffs 43 in use, as explained further below. In the preferred embodiment, the base 44 of each wing 19 is attached to a flange, as shown in Figure 17(a)-(c). Thus, as shown in Figure 17(b), a first strip of adhesive 34 is disposed between the portion 18 of cover layer 8 adjacent its longitudinal edge 33 and the portion 10 of the barrier layer 9 adjacent its longitudinal edge 33 and a second strip of adhesive is disposed between the opposite surface of the portion 10 of the barrier layer and the base 44 of the wing 19 so that the flange and wing base form a unitary structure. Alternatively, heat sealing could be used in place of adhesive strips 34. As a result this arrangement, the cuff 25 encloses the wing base 44, giving the absorbent article having cut and paste wings a more aesthetically pleasing appearance. More importantly, this method of attaching the wings to the absorbent article provides certain functional benefits, as described below.

Please replace the paragraph on page 44, beginning at line 1, with the following rewritten paragraph:

Another advantage of the cuff/wing arrangement shown in Figures 16 and 17(a)-(c) is that the pockets 22, and therefore, the panty crotch edges 28, are disposed below the base 12 of the cuff 43. As a result, the cuffs 43 extend a distance E, shown in Figure 16, beyond the panty crotch edges. Unlike prior art attempts at sealing cuffs, the distance E is not limited to

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the thickness of the wing 19. Thus, the distal end 13 of the cuff makes sealing contact with the user's body regardless of the size or anatomical shape of the user or the panty crotch width.